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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,151	12/09/2005	David F. Lawson	P02055US2A	9511

7590 10/09/2007  
Bridgestone Americas Holding Inc  
Chief Intellectual Property Counsel  
1200 Firestone Parkway  
Akron, OH 44317-0001

EXAMINER

RABAGO, ROBERTO

ART UNIT	PAPER NUMBER
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1796

MAIL DATE	DELIVERY MODE
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10/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/560,151

Applicant(s)

LAWSON ET AL.

Examiner

Roberto Rábago

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4,8-13 and 17-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,8-13 and 17-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 7/9/07; 9/4/07
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-4, 8-13, 17, and 19-23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

(a) In claim 9, no disclosure of additives comprising vulcanized natural rubber or vulcanized synthetic rubber can be found in the disclosure as originally filed. Page 57 disclosed natural rubber and synthetic rubber, but does not indicate that they are vulcanized.

(b) In claims 19 and 23, no disclosure of using "at least one of X' and Y'" providing "an amine group or an alky tin group" can be found in the disclosure as originally filed.

(c) In claims 19 and 23, no disclosure "at least one of X' and Y'" corresponding to a generic "epoxide group" can be found in the disclosure as originally filed. While

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specific examples of epoxides are disclosed, the unlimited use of any epoxide is not, nor in combination with "at least one of X' and Y'."

(d) In claim 22, the disilacyclopentane compound is not supported in the specification because "2,5-" is missing from the compound name.

(e) In claim 22, no disclosure of the use of tributyltin for Y' can be found in the disclosure as originally filed.

(f) In claim 1 (and claims 2-4, 8 and 9 and 20 as dependent thereon), no disclosure of any of the compounds in the sixteenth or seventeenth lines can be found in the disclosure as originally filed as being epoxy-generating reagents. The same issue exists in claim 10 (and claims 11, 12, 13, 17 and 21 as dependent thereon).

3. Claims 3, 4, 12, 13 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) In claims 3, 4, 12, 13 and 18, the use of the word "comprises" in the definition of X' and/or Y' is indefinite because it cannot be determined whether X' and/or Y' is limited to the stated structures, or whether the list is open to other unrecited structures. Compare claims 1 and 20-22, which use the phrases "X' is" and "Y' is" to define those parameters.

***Claim Rejections - 35 USC § 102***

4. Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Tate et al. (US 4,927,887).

The reference discloses in Example 4 a living polymerization of polybutadiene functionalized in a first process with 2-vinylpyridine and second process with benzyl chloride, followed by compounding with carbon black for the purpose of forming a vulcanizate, including all claimed limitations. Regarding the "proviso," there is no reason to believe that the functional groups added to the reference polymer would have zero interaction with silica and/or carbon black, particularly in view of the fact that the reference states that the modified polymers are to be mixed with silica, carbon, or mixtures thereof (see col. 2, lines 42-52).

5. Claim 18 is rejected under 35 U.S.C. 102(e) as being anticipated by Ozawa et al (US 20050070672).

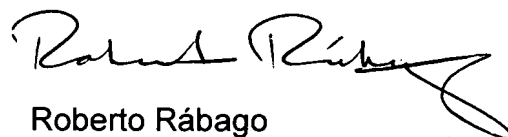
The reference discloses in Examples 8-13 living polymerization of polybutadiene functionalized in a first process with a first hydrocarbyloxysilane compound and second process with a second hydrocarbyloxysilane compound, followed by vulcanizing with carbon black or silica, including all claimed limitations.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rábago whose telephone number is (571) 272-1109. The examiner can normally be reached on Monday - Friday from 8:00 - 4:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Roberto Rábago  
Primary Examiner  
Art Unit 1713

RR  
September 30, 2007